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IDENTIFICATION PAGE

Applicants: Bisdikian et al

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For: PERVASIVE, PERSONAL DATA INTERACTIVITY OVER VOICE-GRADE
CIRCUIT-SWITCHED CELLULAR NETWORKS

Attn: Board of Patent Appeals and Interferences

Commissioner for Patents

United States Patent and Trademark Office

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APPEAL BRIEF

Sir:

Pursuant to 35 U.S.C. 134 and 37 C.F.R. 41.37, entry of this Appeal Brief in support of the Notice of Appeal filed July 12, 2007 in the above-identified matter is respectfully requested.

Please charge any fee necessary to enter this paper and credit any overpayment to deposit account 50-0510.

Respectfully submitted,

By: _____/Louis Herzberg/
Dr. Louis P. Herzberg
Reg. No. 41,500
Voice Tel. (845) 352-3194
Fax. (845) 352-3194

3 Cloverdale Lane

Monsey, NY 10952

Customer Number: 54856

1 **BISDIKIAN**

2 **PAGE NUMBERS TO BE CORRECTED AT END OF TASK**

3 **(B) TABLE OF CONTENTS**

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1 (C) REAL PARTY IN INTEREST;

2 Statement of Real Party in Interest

3 The real party in interest in the above-identified patent application is the International
4 Business Machines Corporation.

1 **(D) RELATED APPEALS AND INTERFERENCES;**

2 **Statement of Related Proceedings**

3 There are no prior or pending appeals or interferences related to this application to
4 Appellant's knowledge.

(E) STATUS OF CLAIMS;

Statement of Claim Status and Appealed Claims

A. Claim Status

Claim 1 stands rejected based on 35 U.S.C. §112, and 35 U.S.C. § 103(a) based on U.S. Patent No. 7,092,699 in view of U.S. Patent No. 6,735,619. .

Claim 2 stands rejected based on 35 U.S.C. § 103(a) based on U.S. Patent No. 7,092,699 in view of U.S. Patent No. 6,735,619.

Claim 3 stands rejected based on 35 U.S.C. §112, and 35 U.S.C. § 103(a) based on U.S. Patent No. 7,092,699 in view of U.S. Patent No. 6,735,619 and in view of U.S. Patent No. 6,988,070.

Claim 4 stands rejected based on 35 U.S.C. § 103(a) based on U.S. Patent No. 7,092,699 in view of U.S. Patent No. 6,735,619 and further in view of U.S. Patent No. 6,988,070. .

Claim 5 stands rejected based on 35 U.S.C. § 103(a) based on U.S. Patent No. 7,092,699 in view of U.S. Patent No. 6,735,619 and further in view of U.S. Patent No. 6,988,070.

Claim 6 stands rejected based on 35 U.S.C. § 103(a) based on U.S. Patent No. 7,092,699 in view of U.S. Patent No. 6,735,619 and further in view of U.S. Patent No. 6,988,070.

Claim 7 stands rejected based on 35 U.S.C. § 103(a) based on U.S. Patent No. 7,092,699 in view of U.S. Patent No. 6,735,619 and further in view of U.S. Patent No. 6,988,070.

Claim 8 stands rejected based on 35 U.S.C. § 103(a) based on U.S. Patent No. 7,092,699 in view of U.S. Patent No. 6,735,619 and further in view of U.S. Patent No. 6,988,070.

Claim 9 stands rejected based on 35 U.S.C. § 103(a) based on U.S. Patent No. 7,092,699 in view of U.S. Patent No. 6,735,619 and further in view of U.S. Patent No. 6,988,070.

1 Claim 10 stands rejected based on 35 U.S.C. § 103(a) based on U.S. Patent No.
2 7,092699 in view of U.S. Patent No. 6,735619 and further in view of U.S. Patent No.
3 6,988,070.

4 Claim 11 stands rejected based on 35 U.S.C. § 103(a) based on U.S. Patent No.
5 7,092699 in view of U.S. Patent No. 6,735619 and further in view of U.S. Patent No.
6 6,988,070.

7 Claim 12 stands rejected based on 35 U.S.C. § 103(a) based on U.S. Patent No.
8 7,092699 in view of U.S. Patent No. 6,735619 and further in view of U.S. Patent No.
9 6,988,070.

10 Claim 13 stands rejected based on 35 U.S.C. § 103(a) based on U.S. Patent No.
11 7,092699 in view of U.S. Patent No. 6,735619 and further in view of U.S. Patent No.
12 6,988,070.

13 Claim 14 stands rejected based on 35 U.S.C. § 103(a) based on U.S. Patent No.
14 7,092699 in view of U.S. Patent No. 6,735619 and further in view of U.S. Patent No.
15 6,988,070.

16 Claim 15 stands rejected based on 35 U.S.C. § 103(a) based on U.S. Patent No.
17 7,092699 in view of U.S. Patent No. 6,735619 and further in view of U.S. Patent No.
18 6,988,070.

19 Claim 16 stands rejected based on 35 U.S.C. § 103(a) based on U.S. Patent No.
20 7,092699 in view of U.S. Patent No. 6,735619 and further in view of U.S. Patent No.
21 6,988,070.

22 Claim 17 stands rejected based on 35 U.S.C. § 103(a) based on U.S. Patent No.
23 7,092699 in view of U.S. Patent No. 6,735619 and further in view of U.S. Patent No.
24 6,988,070..

25 Claim 18 stands rejected based on 35 U.S.C. § 103(a) based on U.S. Patent No.
26 7,092699 in view of U.S. Patent No. 6,735619 and further in view of U.S. Patent No.
27 6,988,070.

28 Claim 19 stands rejected based on 35 U.S.C. § 103(a) based on U.S. Patent No.
29 7,092699 in view of U.S. Patent No. 6,735619 and further in view of U.S. Patent No.
30 6,988,070..

31 Claim 20 stands rejected based on 35 U.S.C. § 103(a) based on U.S. Patent No.
32 7,092699 in view of U.S. Patent No. 6,735619 and further in view of U.S. Patent No.
33 6,988,070.

34 Claim 21 stands rejected based on 35 U.S.C. § 103(a) based on U.S. Patent No.

1 7,092699 in view of U.S. Patent No. 6,735619 and further in view of U.S. Patent No.
2 6,988,070.

3 Claim 22 stands rejected based on 35 U.S.C. § 103(a) based on U.S. Patent No.
4 7,092699 in view of U.S. Patent No. 6,735619 and further in view of U.S. Patent No.
5 6,988,070.

6 Claim 23 stands rejected based on 35 U.S.C. § 103(a) based on U.S. Patent No.
7 7,092699 in view of U.S. Patent No. 6,735619 and further in view of U.S. Patent No.
8 6,988,070.

9 Claim 24 stands rejected based on 35 U.S.C. § 103(a) based on U.S. Patent No.
10 7,092699 in view of U.S. Patent No. 6,735619 and further in view of U.S. Patent No.
11 6,988,070.

12 Claim 25 stands rejected based on 35 U.S.C. § 103(a) based on U.S. Patent No.
13 7,092699 in view of U.S. Patent No. 6,735619 and further in view of U.S. Patent No.
14 6,988,070.

15 Claim 26 stands rejected based on 35 U.S.C. § 103(a) based on U.S. Patent No.
16 7,092699 in view of U.S. Patent No. 6,735619 and further in view of U.S. Patent No.
17 6,988,070.

18 Claim 27 stands rejected based on 35 U.S.C. § 103(a) based on U.S. Patent No.
19 7,092699 in view of U.S. Patent No. 6,735619.

20 Claim 28 stands rejected based on 35 U.S.C. § 103(a) based on U.S. Patent No.
21 7,092699 in view of U.S. Patent No. 6,735619.

22 Claim 29 stands rejected based on 35 U.S.C. § 103(a) based on U.S. Patent No.
23 7,092699 in view of U.S. Patent No. 6,735619.

24 Claim 30 stands rejected based on 35 U.S.C. § 103(a) based on U.S. Patent No.
25 7,092699 in view of U.S. Patent No. 6,735619.

26 Claim 31 stands rejected based on based on 35 U.S.C. § 103(a) based on U.S. Patent
27 No. 7,092699 in view of U.S. Patent No. 6,735619.

28 Claim 32 stands rejected based on 35 U.S.C. § 103(a) based on U.S. Patent No.
29 7,092699 in view of U.S. Patent No. 6,735619.

30 Claim 33 stands rejected based on 35 U.S.C. § 103(a) based on U.S. Patent No.
31 7,092699 in view of U.S. Patent No. 6,735619.

32 Claim 34 stands rejected based on 35 U.S.C. § 103(a) based on U.S. Patent No.

1 7,092699 in view of U.S. Patent No. 6,735619.

2 Claim 35 stands rejected based on 35 U.S.C. § 103(a) based on U.S. Patent No.
3 7,092699 in view of U.S. Patent No. 6,735619.

4 Claim 36 stands rejected based on 35 U.S.C. § 103(a) based on U.S. Patent No.
5 7,092699 in view of U.S. Patent No. 6,735619.

6 Claim 37 stands rejected based on 35 U.S.C. § 103(a) based on U.S. Patent No.
7 7,092699 in view of U.S. Patent No. 6,735619.

8 **B. Appealed Claims**

9 Claims 1-37 are appealed. A clean copy of these claims is contained in (J) Claims
10 Appendix of this Appeal Brief.

1

2 (F) STATUS OF AMENDMENTS;

3

Statement of Amendment Status

4

An amendment after FINAL is pending in this application. The Amendment was filed
5 March 16, 2007. It is believed that the Amendment has been considered and probably
6 entered.

(G) SUMMARY OF CLAIMED SUBJECT MATTER

Claims 1, 29 and 31 are the independent claims under appeal.

Claim 1 is a method claim for service interaction method comprising a user interacting with at least one remote service accessible through a home data distribution network. The home data distribution network comprises an aggregation of at least one communications media and at least one communications protocol used to access said at least one remote service from a serving entity.

Claim 29. is an apparatus for a user to interact with at least one remote service, comprising user connecting means, user viewing means, second connecting means, user selecting means, second selecting means, and user access means. The user connecting means is for the user connecting to a serving entity using a client device attached to a wireless, circuit-switched, voice telephony network, said user connecting means employing only one of a cellular voice network and a PSTN. The user viewing means is for obtaining and viewing a list of accessible remote services from the serving entity. The second connecting means is for attaching the apparatus to a communications medium and using a communications protocol, taken from an aggregation of communication media and protocols, through which said at least one remote service can be accessed. The user selecting means is for selecting said at least one remote service from said list. The second selecting means is for selecting the communications medium and protocol to access the selected at least one service. The user access means is for accessing and viewing the at least one remote service in obtaining desired results.

Claim 31 is an apparatus attached on a home network for a user using a client device attached to a wireless, circuit-switched, voice telephony network, to interact with at least one service on the home network. The apparatus comprising: a telephone modem, a dial-in service module, and a protocol transport module. The telephone modem is to directly receive an incoming call from the client device, and also to receive and transmit data over a telephone network. The telephone

1 modem has a client port through which the apparatus attaches to the telephone network. The
2 apparatus is a single apparatus through which a user with the client device can establish
3 communication in one step. The client device employs only one of a cellular voice network and a
4 PSTN. The dial-in service module is to implement dial-in logic for the client device. The browser
5 server module is for managing data for remote display. The protocol transport module is to
6 implement protocols needed to transport data back and forth between a browser application in the
7 client device and the browser server module.

8 In the following the support in the specification and figures is given for all claims. Page and line
9 numbers are provided for each claim or claim element as follows:

10 1. A service interaction method comprising a user interacting with at least one remote service
11 accessible through a home data distribution network, said home data distribution network
12 comprising an aggregation of at least one communications media and at least one communications
13 protocol
14 (support for this is provided while explaining 107 in Fig. 1 on pg. 9, lines 1-9, that teaches
15 using multiple technologies in creating a home distribution network) used to access said at
16 least one remote service from a serving entity (support for this is provided on pg. 14, lines
17 1-15, in combination with items 103 in Fig. 1 and 211 and 216 in Fig. 2, that teach
18 accessing a service entity and requesting execution of services through that entity),

19 the step of interacting comprising:

20 employing only one of a cellular voice network and a PSTN, said user connecting to a serving
21 entity attached to said home data distribution network using a client device attached to a wireless,
22 circuit-switched, voice telephony network
23 (support for this is provided while explaining 101, 102, 103 ,108, 109, 110 in Fig. 1 on
24 pg. 6, lines 8-26, that teach the use of a client device (e.g., a cellular phone 101), a cellular
25 network 108, to which the client device is connected, a PSTN network 109, that is
26 connected to the cellular network on the one side and to serving entity (e.g., a web server

103) one the other side) ,

obtaining and viewing a list of at least one remote service from accessible remote services from said serving entity accessible remotely via said home network from said serving entity using at least one of said communications media and one of said communications protocols;

(support for this is spread throughout the invention, with a representative reference item 405 (a service list) and pg. 15, lines 15-20, teach providing a list of available services)

selecting said at least one remote service from said list;

(support for this is spread throughout the invention, with a representative reference pg. 15, lines 20-23, that teach that data send from the browser application (which resides in the client device), and hence are the result of its user operating on it, includes a selection of at least one service to control).

selecting said at least one communications media and at least one communications protocol that said ~~selected~~ at least one remote service uses; and

(support for this is provided while explaining 217 on pg. 9, lines 7-16 --services are accessed through multiple communication protocols and media therefore one of them needs to be selected prior to accessing them)

accessing and viewing said at least one remote service in obtaining desired results.

(support for this is provided on pg. 13, lines 9-14, and pg. 16, lines 3-13, which teach that status information with regard to an action executed on a selected service and whether the desired results from the action has been obtained).

2. (original) A method as recited in claim 1, wherein the client device is portable.

(support for this is provided on pg. 7, lines 8-9, which teach the use of a portable device)

3. (Currently amended) A method as recited in claim 1,

1 wherein the client device is a cellular telephone;

2 (support for this is provided while explaining 101 in Fig. 1 on pg. 7, lines 10-13; the
3 equivalent term “cell phone” is also used instead of “cellular phone,” in, say, Fig. 1)

4 wherein the step of connecting includes dialing-up directly to the serving entity;

5 (support for this is provided while explaining the communication between the client device
6 and the remote dial-up server in Fig. 2 on pg. 7, lines 28-30, which teach the direct dialing
7 to a server at home --the server playing the role of the serving entity)

8 wherein the step of viewing is performed employing a viewing device collocated with said client
9 device;

10 (support for this is provided in Fig. 1 where item 101 is a cell-phone with a display (the
11 viewing device) and in Fig. 2 where the client device is associated with a browser
12 application 210, see also 7, lines 2-5, furthermore pg. 17, lines 10-15, teach the
13 visualization across several interconnected computer systems)

14 wherein the viewing device depicts information in a form including at least one of: text, graphics,
15 images, light display, voice or any combination of these;

16 (support for this is provided on pg. 13, lines 9-14, which teach the use of various viewing
17 modalities)

18 wherein the step of selecting includes employing a menu;

19 (support for this is provided using the broader term of “list” while explaining 405 in Fig. 4
20 on pg. 15, lines 17-20)

21 wherein the step of viewing is performed employing a web-browser and the serving entity is a
22 web-server;

23 (support for “employing a web-browser” is provided while describing the
24 types/capabilities of cellular phones considered on pg. 3, line 9; the broader term browser
25 application is also used elsewhere in the invention, e.g., on the client device in Fig. 2 ---

1 support for “serving entity is a web-server” this is provided on the discussion about
2 service entities and its relation to the Web-server 103 in Fig. 1 on pg. 14, lines 5-15)

3 wherein the step of connecting includes dialing-up to the serving entity through a data network to
4 which the serving entity is connected;

5 (support for this is provided while explaining 305 and 301 in Fig. 3 on pg. 11, lines 3-5; in
6 this claim the broader term “data network” instead of the more specific “intranet” 301 is
7 used; it is well known that an intranet is a type of a data network)

8 wherein the data network is the Intranet controlled by an Internet Service Provider;

9 (support for this is provided while explaining 301 in 3 on pg. 11, lines 3-5, which teach
10 that the data network is an Intranet operated by an ISP, and Internet Service Provider)

11 wherein the data network uses the TCP/IP protocol suite for transporting information;

12 (support for this is provided while explaining the role of 301 303 in Fig. 3 and pg. 11, line
13 25 to pg. 12, line 10, which teach the use of TCP/IP protocol for communication; it is well
14 known that the PPP protocol is used to not only carry TCP/IP traffic but also configure IP
15 hosts accessing a TCP/IP network via dial-up line TCP/IP traffic from a client device to
16 flow in the intranet 301, pg. 11, line 25 to pg. 12, line 10)

17 wherein said wireless, circuit-switched, voice telephony network is a first generation, analog,
18 cellular network;

19 (support for this is provided on pg. 5, lines 22-26)

20 wherein said wireless, circuit-switched, voice telephony network is a second generation, digital,
21 cellular network;

22 (support for this is provided on pg. 5, lines 22-26)

23 wherein the step of dialing-up directly to the service entity further includes passing dialing
24 signaling and control data to the serving entity through an intermediary data network;

1 (support for this is provided on pg. 9, lines 22-28, which teach passing signaling and
2 control data over a VoIP network, which operates on data networks)

3 wherein the step of dialing-up to the serving entity through a data network, further includes
4 dialing-up to the serving entity through a sequence of at least one data network, the last one of
5 which the serving entity is attached to;

6 (support for this is provided on pg. 11, lines 6-13, which teach that multiple, or a
7 sequence, of ISPs (and their data networks) can be involved as a client device in one end
8 tries to connect to a serving entity on the other end)

9 wherein at least one service agent is a computer software module executable on a computer; and
10 (support for this is provided in combination of 103 in Fig. 1 (the web-server which is a
11 computer) and Fig. 4 that shows an instance of 103 with service agents 406 residing in it;
12 see also pg. 14, lines 19-24 and pg. 15, lines 26-29)

13 wherein the step of viewing views the list on a viewing device in a manner that depends on the
14 user's access privileges to said at least one remote service,

15 (support for this is provided on pg. 13, line 16-23, which teach the assignment of security
16 credential to users applicable to different entities like the dial-up sever, the homer server,
17 etc., and as result the services available to the user will be reflective of these service
18 credentials)

19 and further comprising:

20 said serving entity employing attributes of said circuit switch network in authenticating said user,
21 wherein said attributes include a telephone number of said client device, and wherein said
22 attributes include a telephone number of said serving entity;

23 (this is an instance of a security credential on pg. 13, line 16-23 that can be assigned when
24 accessing a dial-up server; it is well known that using caller ID technologies, the calling
25 number for a phone call may serve as form of user authentication, especially using
26 personal cellular phone as is the case in this invention; see possible caller ID application on

pg. 2, lines 4-9)

establishing credentials so that said at least one remote service can be manipulated in a secure manner on the serving entity;

(support for this is provided on pg. 12, line 11-24, which teach of the use of secure means, e.g., IPSec, or directly dial-up and subsequent authentication, for eventually accessing the desired services)

the serving entity providing access to at least one service agent used to access and control said at least one remote service;

(support for this is provided while explaining 406 and 407 in Fig. 4 on pg. 15, line 29 through pg. 16 line 3, which teach the use of software agents (running on computer devices) to generate signals as a means to control the desired services, the control signals)

activating said computer software module prior to invoking a particular remote service;

activating said computer software module on demand after a particular remote service has been invoked;

storing said computer software module at a data repository; and

dynamically retrieving and activating said computer software module from the data repository after invoking a particular remote service.

(support for these four items is provided while explaining the service logic 216 in Fig. 2; pg., 8, lines 25-30, which teach that the service logic, which resides on a (computer) server, may activate software agents to control services in advance of needing them, on demand upon request accessing the service, store them in a repository, and retrieve dynamically from it and then activating then prior to using them).

4. (original) A method as recited in claim 1, wherein the step of connecting includes dialing-up

1 directly to the serving entity.

2 (support for this is provided while explaining the communication between the client device
3 and the remote dial-up server in Fig. 2 on pg. 7, lines 28-30, which teach the direct dialing
4 to a server at home --the server playing the role of the serving entity)

5 5. (original) A method as recited in claim 1, wherein the step of viewing is performed employing a
6 viewing device collocated with said client device.

7 (support for this is provided in Fig. 1 where item 101 is a cell-phone with a display (the
8 viewing device) and in Fig. 2 where the client device is associated with a browser
9 application 210, see also 7, lines 2-5, furthermore pg. 17, lines 10-15, teach the
10 visualization across several interconnected computer systems)

11 6. (previously presented) A method as recited in claim 1, wherein the viewing device depicts
12 information in a form including at least one of: text, graphics, images, light display, voice or any
13 combination of these.

14 (support for this is provided on pg. 13, lines 9-14, which teach the use of various viewing
15 modalities)

16 7. (original) A method as recited in claim 1, wherein the step of selecting includes employing a
17 menu.

18 (support for this is provided using the broader term of “list” while explaining 405 in Fig.4
19 on pg. 15, lines 17-20)

20 8. (original) A method as recited in claim 5, wherein the step of viewing is performed employing a
21 web-browser and the serving entity is a web-server.

22 (support for “employing a web-browser” is provided while describing the
23 types/capabilities of cellular phones considered on pg. 3, line 9; the broader term browser
24 application is also used elsewhere in the invention, e.g., on the client device in Fig. 2 ---
25 support for “serving entity is a web-server” this is provided on the discussion about
26 service entities and its relation to the Web-server 103 in Fig. 1 on pg. 14, lines 5-15)

1 9. (original) A method as recited in claim 1, wherein the step of connecting includes dialing-up to
2 the serving entity through a data network to which the serving entity is connected.

3 (support for this is provided while explaining 305 and 301 in Fig. 3 on pg. 11, lines 3-5;
4 in this claim the broader term “data network” instead of the more specific “intranet” 301 is
5 used; it is well known that an intranet is a type of a data network)

6 10. (original) A method as recited in claim 9, wherein the data network is the Intranet controlled
7 by an Internet Service Provider.

8 (support for this is provided while explaining 301 in 3 on pg. 11, lines 3-5, which teach
9 that the data network is an Intranet operated by an ISP, and Internet Service Provider)

10 11. (original) A method as recited in claim 9, wherein the data network uses the TCP/IP protocol
11 suite for transporting information.

12 (support for this is provided while explaining the role of 301 303 in Fig. 3 and pg. 11, line
13 25 to pg. 12, line 10, which teach the use of TCP/IP protocol for communication; it is well
14 known that the PPP protocol is used to not only carry TCP/IP traffic but also configure IP
15 hosts accessing a TCP/IP network via dial-up line TCP/IP traffic from a client device to
16 flow in the intranet 301, pg. 11, line 25 to pg. 12, line 10)

17 12. (original) A method as recited in claim 1, further comprising said serving entity employing
18 attributes of said circuit switch network in authenticating said user.

19 13. (original) A method as recited in claim 12, wherein said attributes include a telephone number
20 of said client device.

21 14. (original) A method as recited in claim 12, wherein said attributes include a telephone number
22 of said serving entity.

23 (the above three claims (12 being more general than 13 and 14) represent an instance of a

1 security credential on pg. 13, line 16-23 that can be assigned when accessing a dial-up
2 server; it is well known that using caller ID technologies, the calling number for a phone
3 call may serve as form of user authentication, especially using personal cellular phone as is
4 the case in this invention; see possible caller ID application on pg. 2, lines 4-9)

5 15. (original) A method as recited in claim 1, further comprising establishing credentials so that
6 said at least one remote service can be manipulated in a secure manner on the serving entity.

7 (support for this is provided on pg. 12, line 11-24, which teach of the use of secure means,
8 e.g., IPSec, or directly dial-up and subsequent authentication, for eventually accessing the
9 desired services)

10 16. (original) A method as recited in claim 1, wherein the step of viewing views the list on a
11 viewing device in a manner that depends on the user's access privileges to said at least one remote
12 service.

13 (support for this is provided on pg. 13, lines 16-23, which teach the assignment of security
14 credential to users applicable to different entities like the dial-up sever, the homer server,
15 etc., and as result the services available to the user will be reflective of these service
16 credentials)

17 17. (original) A method as recited in claim 1, further comprising the serving entity providing
18 access to at least one service agent used to access and control said at least one remote service.

19 (support for this is provided while explaining 406 and 407 in Fig. 4 on pg. 15, line 29
20 through pg. 16 line 3, which teach the use of software agents (running on computer
21 devices) to generate signals as a means to control the desired services, the control signals)

22 18. (original) A method as recited in claim 17, wherein at least one of said at least one service
23 agent is a computer software module executable on a computer.

24 (support for this is provided in combination of 103 in Fig. 1 (the web-server which is a
25 computer) and Fig. 4 that shows an instance of 103 with service agents 406 residing in it;
26 see also pg. 14, lines 19-24 and pg. 15, lines 26-29)

1 19. (original) A method as recited in claim 18, further comprising activating said software module
2 prior to invoking a particular remote service.

3 20. (original) A method as recited in claim 18, further comprising activating said software module
4 on demand after a particular remote service has been invoked.

5 21. (original) A method as recited in claim 18, further comprising storing said software module at
6 a data repository.

7 22. (original) A method as recited in claim 21, further comprising dynamically retrieving and
8 activating said software module from the data repository after invoking a particular remote
9 service.

10 (support for these claims 19-22 is provided while explaining the service logic 216 in Fig.
11 2; pg., 8, lines 25-30, which teach that the service logic, which resides on a (computer)
12 server, may activate software agents to control services in advance of needing them, on
13 demand upon request accessing the service, store them in a repository, and retrieve
14 dynamically from it and then activating then prior to using them).

15 23. (original) A method as recited in claim 1, wherein said wireless, circuit-switched, voice
16 telephony network is a first generation, analog, cellular network. (support for this is provided on
17 pg. 5, lines 22-26)

18 24. (original) A method as recited in claim 1, wherein said wireless, circuit-switched, voice
19 telephony network is a second generation, digital, cellular network.

20 (support for this is provided on pg. 5, lines 22-26)

21 25. (original) A method as recited in claim 4, wherein the step of dialing-up directly to the service
22 entity further includes passing dialing signaling and control data to the serving entity through an
23 intermediary data network.

(support for this is provided on pg. 9, lines 22-28, which teach passing signaling and control data over a VoIP network, which operates on data networks)

26. (original) A method as recited in claim 9, wherein the step of dialing-up to the serving entity through a data network, further includes dialing-up to the serving entity through a sequence of at least one data network, the last one of which the serving entity is attached to.

(support for this is provided on pg. 11, lines 6-13, which teach that multiple of ISPs (and their data networks) can be involved as a client device in one end tries to connect to a serving entity on the other end)

27. (original) An article of manufacture comprising a computer usable medium having computer readable program code means embodied therein for causing a user to interact with at least one remote service, the computer readable program code means in said article of manufacture comprising computer readable program code means for causing a computer to effect the steps of claim 1.

(support for this is provided on pg. 16 line 30 through pg. 17 line 8, and pg. 18, lines 10-13, which teach an article of manufacture that effects the steps of claim 1).

28. (original) A program storage device readable by machine, tangibly embodying a program of instructions executable by the machine to perform method steps for causing a user to interact with at least one remote service, said method steps comprising the steps of claim 1.

(support for this is provided on pg. 16 line 30 through pg. 17 line 8, and pg. 18, lines 25-30, which teach a program storage device storing a program that executes the steps of the method of claim 1)

29. (Previously presented) An apparatus for a user to interact with at least one remote service, comprising:

user connecting means for said user connecting to a serving entity using a client device attached to a wireless, circuit-switched, voice telephony network, said user connecting means employing

- 1 only one of a cellular voice network and a PSTN;
- 2 user viewing means for obtaining and viewing a list of accessible remote services from said
- 3 serving entity;
- 4 second connecting means for attaching said apparatus to a communications medium and using a
- 5 communications protocols, taken from an aggregation of communication media and protocols,
- 6 through which said at least one remote service can be accessed;
- 7 user selecting means for selecting said at least one remote service from said list;
- 8 second selecting means for selecting the communications medium and protocol to access said
- 9 selected at least one service; and
- 10 user access means for accessing and viewing said at least one remote service in obtaining desired
- 11 results.

12 (support for this is provided while explaining Fig. 4 in its entirety on pg. 14 line 16

13 through pg. 16 line 13, which teach a user connecting means 401 and 402, user viewer

14 means for viewing list of accessible services, the browser server 404 and 405, second

15 connecting means 407, user selecting means, again through the browser 404, second

16 selecting means through the combination of 404, 406 and 407, user access means for

17 accessing and viewing, again using the browser server 404)

18 30. (original) A computer program product comprising a computer usable medium having

19 computer readable program code means embodied therein for causing a user to interact with at

20 least one remote service, the computer readable program code means in said computer program

21 product comprising computer readable program code means for causing a computer to effect the

22 functions of claim 28.

23 (support for this is provided on pg. 16 line 30 through pg. 17 line 8; pg. 18, lines 25-30;

24 and pg. 17 line 18 through pg. 18 line 9, which teach of a computer program effecting the

function of claim 28)

31. (Previously presented) An apparatus attached on a home network for a user using a client device attached to a wireless, circuit-switched, voice telephony network, to interact with at least one service on said home network, said apparatus comprising:

a telephone modem to directly receive an incoming call from the client device, and also to receive and transmit data over a telephone network, said telephone modem having a client port through which the apparatus attaches to the telephone network, said apparatus being a single apparatus through which a user with the ~~user~~ client device can establish communication in one step, said client device employing only one of a cellular voice network and a PSTN;

a dial-in service module to implement dial-in logic for the client device;

a browser server module for managing data for remote display; and

a protocol transport module to implement protocols needed to transport data back and forth between a browser application in the client device and said browser server module.

(support for this is provided while explaining Fig. 2 in its entirety on pg. 7 line 21 through pg. 11 line 2, which teach a telephone modem implied by the use of the PPP layer 215, in conjunction with the client port 401 in Fig. 4; employing one cellular network 108 and PSTN 109; dial-in service model, the entire remote dial-up server stack, a browser server 211; a transport module between the browser application and the browser server, the TCP/IP interaction 212 and 213).

32. (original) An apparatus as recited in claim 31, wherein said browser server is used to obtain, organize, and manipulate data received from and data sent to the client device through the protocol transport module.

(support for this is provided on pg. 15, lines 12- 14)

1 33. (original) An apparatus as recited in claim 32, wherein said data sent to the client device are
2 displayed and viewed by the browser application in the client device. (support for this is provided
3 on pg. 15, lines 15-17)

4 34. (previously presented) An apparatus as recited in claim 32, wherein said data sent includes a
5 list of services that are accessible by the client device. (support for this is provided on pg. 15, lines
6 17-20)

7 35. (Previously presented) An apparatus as recited in claim 31, wherein said data received by the
8 browser application in the client device include a selection of at least one service the user of the
9 client device controls and an action to be taken for a selected service, and upon receipt of the
10 action the browser server interacts with a particular service agent to implement the control logic
11 for controlling the selected service, wherein a control signal generated by the service agent exits
12 the apparatus through attachment of the home network.

13 (support for this is provided on pg. 15 line 20 through pg. 16 line 3)

14 36. (Previously presented) An apparatus as recited in claim 31, wherein said dial-in server module
15 triggers at least one particular module in the apparatus to process any incoming calls and requests
16 from the client device.

17 (support for this is provided on pg. 15, lines 5-7)

18 37. (previously presented) An apparatus as recited in claim 31, wherein said dial-in server module
19 performs user authentication.

20 (support for this is provided on pg. 15, lines 4-5)

1 **(H) GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL;**

2 The ground for rejections for all claims under appeal are under 35 U.S.C. 112 and 35 USC §
3 103(a) as listed below.

4 a) The rejection

5 Claims 1, 3 are rejected under 35 U.S.C. 112(b)

6 *Claims 1-2, 27-37 are rejected under 35 USC. 103(a) as being unpatentable over U.S.*
7 *Patent No. 7,092,699 to Heifer in view of U.S. Patent No. 6,735,619 to Sawada.*

8 *Claims 3-26 are rejected under 35 USC § 103(a) as being unpatentable over U.S. patent*
9 *No. 7,092,699 to Heifer in view of U.S. Patent No. 6,735,619 to Sawada as applied to*
10 *claims 1 above, and in further in view of U.S. Patent No. 6,988,070 to Kawasaki et al.*

11 b) Appellant requests that independent claims Claims 1, 29 and 31 be reviewed
12 separately.

1 (I) ARGUMENT;

2 The following are the contentions of appellant with respect to each ground of rejection presented
3 for review, and the basis therefor.

4 Applicants contend:

5 Claims 1-37 are pending in the present application to Bisdikian, et al, hereinafter Bisdikian.

6 1. Claim rejections under 35 U.S.C. §112:

7 Applicants respectfully state that claims 1 and 3 as amended provide sufficient antecedent
8 basis for the limitations. This overcomes the rejection of claims 1 and 3 under - 35 USC §
9 112.

10 2. Claims 1-2, 27-37 were rejected under 35 USC § 103(a) as being unpatentable over U.S
11 Patent No. 7,092699 to Hefter in view of US. Patent No. 6,735619 to Sawada.

12 3. Claims 3-26 were rejected under 35 USC § 103(a) as being unpatentable over U.S. patent No.
13 7,092699 to Hefter in view of U.S. Patent No. 6,735719 to Sawada as applied to claims 1 above,
14 and in further in view of U.S. Patent No. 6,988070 to Kawasaki et al.

15 Appellant will first present the common arguments, and then present the arguments specific to all
16 Claims 1 -37 of Bisdikian under appeal in numeric order to the degree that office communication
17 makes remarks.

18 It is particularly noted, that the office communication fails to show any showing of or any
19 obviousness criteria used for claims 4-26. Applicants, request these claims to be summarily
20 allowed by the Appeal Board, in so much that the Examiner made no particular remarks in regard
21 to claims 4-26.

1 These claims include limitations not addressed in the office communication regarding as to why
2 the cited references make obvious limitations as follows which contribute to the novelty and
3 advantages of the invention claimed in claims 4-26. These limitations respectively for claims 4-26
4 are:

5 wherein the step of connecting includes dialing-up directly to the serving entity.

6 wherein the step of viewing is performed employing a viewing device collocated with said
7 client device.

8 wherein the viewing device depicts information in a form including at least one of: text,
9 graphics, images, light display, voice or any combination of these.

10 wherein the step of selecting includes employing a menu.

11 wherein the step of viewing is performed employing a web-browser and the serving entity
12 is a web-server.

13 wherein the step of connecting includes dialing-up to the serving entity through a data
14 network to which the serving entity is connected.

15 wherein the data network is the Intranet controlled by an Internet Service Provider.

16 wherein the data network uses the TCP/IP protocol suite for transporting information.

17 further comprising said serving entity employing attributes of said circuit switch network
18 in authenticating said user.

19 wherein said attributes include a telephone number of said client device.

1 wherein said attributes include a telephone number of said serving entity.

2 further comprising establishing credentials so that said at least one remote service can be
3 manipulated in a secure manner on the serving entity.

4 wherein the step of viewing views the list on a viewing device in a manner that depends on
5 the user's access privileges to said at least one remote service.

6 further comprising the serving entity providing access to at least one service agent used to
7 access and control said at least one remote service.

8 wherein at least one of said at least one service agent is a computer software module
9 executable on a computer.

10 further comprising activating said software module prior to invoking a particular remote
11 service.

12 further comprising activating said software module on demand after a particular remote
13 service has been invoked.

14 further comprising storing said software module at a data repository.

15 further comprising dynamically retrieving and activating said software module from the
16 data repository after invoking a particular remote service.

17 wherein said wireless, circuit-switched, voice telephony network is a first generation,
18 analog, cellular network.

19 wherein said wireless, circuit-switched, voice telephony network is a second generation,

1 digital, cellular network.

2 wherein the step of dialing-up directly to the service entity further includes passing dialing
3 signaling and control data to the serving entity through an intermediary data network.

4 wherein the step of dialing-up to the serving entity through a data network, further
5 includes dialing-up to the serving entity through a sequence of at least one data network, the last
6 one of which the serving entity is attached to.

7 **COMMON ARGUMENT**

8 With regard to the rejections under 35 USC. 103(a) Applicants/Appellant contend:

9 The invention in Claims 1-37 is directed to the field of telephone networks, and more particularly
10 to cellular telephony as a means for remotely accessing and/or manipulating information and
11 processes. It claims a service interaction method (and a corresponding system) for a user
12 interacting with at least one remote service accessible through a home data distribution network.
13 The home data distribution network includes an aggregation of at least one communications
14 media and at least one communications protocol used to access the at least one remote service
15 from a serving entity. Accessing devices at home via public switched telephone networks
16 (PSTNs) was possible before the present invention. For example, it was possible for people to
17 access their answering machine using, say, a pay phone. However, a drawback for such purely
18 telephony-based access to home devices was the limited, if any, capabilities possible in providing
19 “feedback” or status information. It was thus desirable to facilitate the use of visual means and in
20 particular textual and graphics means to greatly enhance user experience in remotely accessing
21 and controlling home devices. Furthermore, as intelligent homes, where the use of computer
22 enabled operations in homes allowed them to adapt automatically to changing conditions (e.g., a
23 persons presence at certain locations, lighting and environmental conditions, and so on) were
24 becoming common place, there was a rising need that computerized services as a whole become
25 remotely accessible rather than just being individual devices and/or appliances.

1 The present invention as claimed in claims 1-37, addresses the above identified needs by
2 developing a solution requiring minimal infrastructure changes. It considers the use of mobile
3 Web-phones that operate over traditional circuit-switched cellular networks, like 2nd generation
4 GSM networks, that serve as wireless extensions to regular (wireline) PSTN. This is useful in a
5 Web-phone dial-in to a home server, which is present in popular computer operating systems such
6 as Microsoft Windows, and provides access to services at the home which are connected to the
7 server through a home distribution network. As services (and devices) at home have the ability to
8 connect to different networks, (e.g. home appliances may connect to via an X10 or IEEE 1394
9 network to a corresponding controller unit) while more elaborate computer-based services may
10 connect via a wireline or wireless local area network (LAN). Thus, accessing appliances and
11 services in a unified manner requires that the home server (or more general the "serving entity" in
12 the present invention) provide access to multiple networks and make use of various
13 communications protocols used over these networks. This is not addressed, taught or made
14 obvious by the combined cited references.

15 The FINAL office communication states:

16 2. Claims 1-2, 27-37 were rejected under 35 USC § 103(a) as being unpatentable over
17 U.S Patent No. 7,092699 to Hefter in view of US. Patent No. 6,735619 to Sawada.

18 Applicants respectfully state that Claims 1-2, 27-37 are apparently not made unpatentable by the
19 invention of Hefter and Sawada. The present invention, claimed in Claims 1-2, 27-37"

20 "Provides methods and apparatus for accessing and controlling services, such as home
21 automation services, visually employing established wireless, cellular telecommunication
22 technologies for voice communications. In example embodiments, users of personal
23 portable devices connect to services over dial-up, wireless, cellular, circuit-switched voice
24 telephone networks, receive and display listings of available services and use these listings
25 to access and manipulate the services."

26 The referenced cited art to Hefter, US Patent 7,092699, filed: April 11, 2001, is entitled:

27 "Seamless wireless phone access service." The Hefter abstract reads:

1 “A method, apparatus, and article of manufacture for synchronizing the memory of a
2 wireless telephone with a networked computer over a wireless link. A communication
3 network in accordance with the present invention, includes a plurality of portable wireless
4 telephones; a plurality of base stations; and at least one controller coupled to the Internet.
5 The portable wireless telephone is adapted to operate a program that stores information
6 locally and automatically synchronizes the local memory with a host computer on the
7 Internet. In operation, when a wireless telephone user receives a telephone call or data
8 from the Internet, the number or the information is stored in the telephone memory and
9 then automatically stored on a computer coupled to the Internet. In another embodiment,
10 a computer coupled to the Internet is adapted to automatically synchronize a portion of
11 the information stored in its memory with that of a portable wireless telephone. The
12 Internet computer may in effect be used to reconstitute the wireless telephone memory”.

13 The other referenced art cited to Sawada , US Patent 6,735,619, filed: February 3, 2000, is
14 entitled: “Home network gateway apparatus and home network device”. The Sawada abstract
15 reads:

16 “A home network gateway apparatus controls information of home network devices
17 connected to an IEEE 1394 bus in a unified manner in a household. When a device is
18 connected to the home network, the home network gateway apparatus of the present
19 invention acquires information of each device and posts the information on a built-in
20 WWW server in a list menu format. The user can remotely control home network devices
21 individually from an apparatus on another network via the list menu”.

22 Thus, Hefter is concerned with synchronizing the memory of a wireless telephone with a
23 networked computer over a wireless link. Sawada is concerned with providing a home network
24 gateway apparatus controls information of home network devices connected to an IEEE 1394 bus
25 in a unified manner in a household. The combined references are not concerned with the enabling
26 of remote control of services at a residential network without the necessity of a service provider
27 as in claims 1-37.

Furthermore, there is apparently no reason to make the combination of Hefter and Sawada except in an effort to apparently use hindsight in an attempt to find and/or make all the elements of Claims 1-2, 27-37 obvious. In order to make a combination, at least one of the references in the combination must cite the other. One skilled in the art would not combine an invention of Hefter in primary US Class **455/414.1** with the invention of Sawada in primary US Class **709/212**.

Besides even when combined the combination does not teach, allude to or make obvious the presently claimed invention in Claims 1-2, 27-37. Thus Claims 1-2, 27-37 are allowable over the combined art. The combined references are not concerned with the enabling of remote control of services at a residential network without the necessity of a service provider as in claims 1-2, 27-37 and actually all claims 1-37.

The FINAL office communication further states:

3. Claims 3-26 were rejected under 35 USC § 103(a) as being unpatentable over U.S. patent No. 7,092699 to Hefter in view of U.S. Patent No. 6,735719 to Sawada as applied to claims 1 above, and in further in view of U.S. Patent No. 6,988070 to Kawasaki et al.

Applicants contend:

Regarding claims 3-26, the third citation, the cited art to Kawasaki, US Patent 6,988070, filed: May 11, 2001, is entitled: "Voice control system for operating home electrical appliances". The Kawasaki abstract reads:

"A voice control system for managing home electrical appliances includes a home agent server (HAS) connected to the home electrical appliances, a microphone and a speaker linked to the agent server through an in-house network. An transaction processing (TP) program runs on HAS and interprets the user's voice request to find a destined appliance and a manner of control the same, and performs the requested control to the destined appliance. The result is notified to the user by means of a voice message".

There is apparently no reason to introduce Kawasaki to combine with Hefter and Sawada except again using hindsight. The art to Kawasaki, US Patent 6,988070, filed: May 11, 2001, is entitled:

1 “Voice control system for operating home electrical appliances.” Besides, none of the cited
2 references refer to another of the cited references. But even the combination does not make the
3 inventions of claims 3-26 obvious.

4 In reviewing the cited alleged prior art, it is noted that Hefter is concerned with synchronizing the
5 memory of a wireless telephone with a networked computer over a wireless link. Sawada is
6 concerned with providing a home network gateway apparatus controls information of home
7 network devices connected to an IEEE 1394 bus in a unified manner in a household. Kawasaki is
8 concerned with providing access to home appliances using voice commands. It is apparent that
9 the cited prior art is motivated by, and addresses, entirely different application spaces requiring
10 persons with diverse expert skills. Hence, applicants find no reason to make the combination of
11 the cited prior art except in an effort to use hindsight in an attempt to find and/or make all the
12 elements of our invention obvious. To the contrary, it is applicants' belief that the differences
13 between our invention and the prior art are such that the invention as a whole would not have
14 been obvious at the time the invention was made to a person having ordinary skill in the art.

15 More specifically, a review of the combined cited prior art shows that the references fail to teach
16 or make obvious a service interaction method (and a corresponding system) as in the presently
17 claimed invention, comprising a user interacting with at least one remote service accessible
18 through a home data distribution network. Sawada, is concerned with a home network gateway
19 apparatus, teaches connecting to at least one device via a home network, however, it does not
20 teach, allude to or make obvious interaction with a service, where service represents a high-level
21 construct that is not tied to any specific device or appliance (appliances is the subject of concern
22 in Kawasaki et al., while Hefter addresses a totally different topic than connecting to devices or
23 appliances). As an example, an environmental control service may not only relate to adjusting the
24 HVAC (heat, ventilation, and AC) at a home, but depending on the time of day, the weather
25 conditions (sunny, cloudy, etc.), and so on, adjusting window openings, window curtain coverage,
26 and so on.

27 It is alleged by the Examiner, that accessing services as opposed to devices (or appliances),

1 represent equivalent concepts and that the former is made obvious by the latter to a person with
2 ordinary skill in the art. However, applicants respectfully disagree with such a position and it is
3 applicants' belief that the one skilled in the art would not consider the methods and/or apparatus
4 for accessing services to be made obvious (and certainly not taught) by the cited combined art
5 which apparently teaches devices.

6 There is no reason to that one skilled in the art would assume a one-to-one correspondence
7 between a service and a device. Applicants assert, that while devices may provide (some form of)
8 services, a single service can be implemented across multiple devices, as exemplified by the
9 aforementioned environmental control service. For different types of services, like in one that
10 relates to home theater entertainment, which may even interact over the Internet with, say,
11 on-line video-on-demand servers and libraries to select a movie to watch through the home
12 theater service. The location, type, ownership, and so on, of the devices supporting the service
13 becomes immaterial. It thus becomes advantageous that in accessing such services, to hide from
14 the users all the elemental components of the service. Services should not have to expose devices
15 to users that support the users, but services need only expose the functions available through
16 them. For this reason, it is noted that the provision of access to a device as presently claims in
17 Bisdikian, is a fundamentally different concept from that of providing access to a service. The
18 cited alleged prior art that considers accessing a device or an appliance does not teach, allude to,
19 or make obvious the concept of accessing services that can exist across multiple devices that need
20 to be accessed as their own distinct entities rather than as the result of an aggregation of controls
21 targeting individual devices. Therefore, the cited prior concerned with accessing devices does not
22 make obvious the ramifications of accessing services instead. Besides, even if this was not so, the
23 combined references fail to teach, allude to or make obvious the steps of the method claims and/or
24 the functions of the elements in the apparatus claims.

25 Furthermore the combined cited prior art fails to teach the use of a home data distribution
26 network comprising an aggregation of at least one communications media and at least one
27 communications protocol to access the services from a serving entity. Sawada is concerned with a
28 home network comprised of simple IEEE 1394 enabled devices, like a lamp or a camera, while

1 Kawasaki does not specify the nature of the home network, however fig. 2 and 5 in Kawasaki
2 imply the use of a single communication interface for the in-house network and hence the use of a
3 single communication medium and protocol. Concerned with an application context that is
4 entirely different than in our invention, Hefter's home network is a single local area network.

5 For example, the step claiming "employing only one of a cellular voice network and a PSTN, said
6 user connecting to a serving entity attached to said home data distribution network using a client
7 device attached to a wireless, circuit-switched, voice telephony network," is a step that is required
8 for connecting a personal mobile (or client) device to the serving entity for services accessed
9 through the home distribution network. Nevertheless, within the context of the presently claimed
10 invention, the use of these networks is very distinct from that which is in the cited art.
11 Specifically, Hefter, who the Examiner uses to invalidate this step of our invention, may indeed
12 allude to use of a wireless network and a PSTN network, however, Hefter in general and
13 especially in the portion cited by the examiner (col. 4, lines 43-54, col. 9, lines 34-54) does not
14 teach, allude to or make obvious the use of these networks for "connecting to a serving entity
15 attached to said home data distribution network," as claimed.

16 The claimed steps of "obtaining and viewing a list of at least one remote service from accessible
17 remote services from said serving entity accessible remotely via said home network from said
18 serving entity using at least one of said communications media and one of said communications
19 protocols; selecting said at least one remote service from said list; selecting said at least one
20 communications media and at least one communications protocol that said at least one remote
21 service uses; and accessing and viewing said at least one remote service in obtaining desired
22 results" is not taught, alluded to or made obvious by the prior art as they are not concerned with
23 services as explained earlier. Furthermore prior art does not teach, allude to or make obvious the
24 use of home distribution networks that comprise of multiple networks which in turn introduces
25 the need of selecting a communications media and protocol in order to access the selected
26 service(s). Finally, none of the cited prior art teaches, alludes to, or makes obvious "accessing and
27 viewing said at least one remote service in obtaining desired results." More specifically, in the
28 portion of Sawada cited by the examiner for invalidating the claimed step of "obtaining and

1 viewing a least one remote service from accessible remote services from said serving entity
2 accessible remotely via said home network from said serving entity using least one of said
3 communications media and one of said communications protocols” (col. 1, lines 39-43, col. 2,
4 lines 16-50), no mention is made to accessing services from a serving entity using at least one
5 communication medium and protocol, and none of these aspects of our invention are taught,
6 alluded to, or made obvious by Sawada. Likewise, in the portion of Sawada cited by the examiner
7 for invalidating the steps of “selecting said at least one communications media and at least one
8 communications protocol that said at least one remote service uses; and accessing and viewing
9 said at least one remote service in obtaining desired results” (col. 4, lines 45-56) no mention is
10 made to selecting at least one of communications media and communication protocol, and this
11 aspect of our invention is not taught, alluded to, or made obvious by Sawada.

12 Furthermore, none of the cited prior art teaches, alludes to, or makes obvious “obtaining desired
13 results.” Prior art, Kawasaki for instance, uses an audible feedback through a speaker to confirm
14 that a command spoken to a microphone has been received by the system considered. However,
15 such form of “intermediate” feedback is fundamentally different that viewing whether the desired
16 “end” results are obtained, which is the result of not only receiving a command from the end-user,
17 but further processing it and instructing the appliance or device to perform the desired operation
18 (e.g., turn-on a light). Even in this case, the question will still remain as to whether the light is
19 eventually turned on, which may not for any number of reasons, e.g., the light-bulb was burned.
20 Note that were we to consider a “home light service” instead, it would had been easy to consider
21 the case that the closed-circuit TV system in the house is an integral part of the service and it can
22 be used to provide a visual verification that the service produced the desired result, and do so
23 without the need for the user to explicitly requesting the CCTV to provide a video feed from the
24 room where the light were to be turned on. This also shows a fundamental difference of providing
25 access to a device, as the prior art teaches, as opposed to providing access to a service.

26 **PARTICULAR ARGUMENTS**

27 In particular, Applicants will argue the cited portions of the referenced art to show the

1 lack of obviousness of the Bisdikian claims. Applicants further contend:

2 Regarding Claim 1, it is clear that it is not made obvious by the combined cited art.
3 Applicants respectfully states that exception is taken with the reading of the elements of claim 1
4 and Hefter and/or Sawada. Claim 1 as amended reads:

5 1. A service interaction method comprising a user interacting with at least one remote
6 service accessible through a home data distribution network, said home data distribution
7 network comprising an aggregation of at least one communications media and at least one
8 communications protocol used to access said at least one remote service from a serving
9 entity, the step of interacting comprising:

10 employing only one of a cellular voice network and a PSTN, said user connecting to a
11 serving entity attached to said home data distribution network using a client device
12 attached to a wireless, circuit-switched, voice telephony network,

13 obtaining and viewing a list of at least one remote service from accessible remote services
14 from said serving entity accessible remotely via said home network from said serving
15 entity using at least one of said communications media and one of said communications
16 protocols;

17 selecting said at least one remote service from said list;

18 selecting said at least one communications media and at least one communications
19 protocol that said at least one remote service uses; and

20 accessing and viewing said at least one remote service in obtaining desired results.

21 Firstly, a review of Hefter, shows that Hefter fails to teach "a service interaction method for a
22 user to interacting with at least one remote service accessible through a home data distribution
23 network, said home data distribution network comprising an aggregation of at least one

1 communications media and at least one communications protocol used access said at least one
2 remote service from a serving entity," as the office communication states above. Hefter [col. 2,
3 lines 4-11] teaches synchronization, in particular for "providing automatic synchronization of a
4 wireless device with a host computer over a wireless network. More specifically, in one
5 embodiment, a system and method consistent with the present invention synchronizes a wireless
6 device having personal organizer and directory functionality with a host computer having the
7 same or similar functionality over a wireless network."

8 The office communication cited portion of Hefter, (See col. 4, lines 43-54, col. 9, lines 34-54),
9 shows that Hefter fails to teach or make obvious even the first elements of claim 1.. Hefter col. 4,
10 lines 43-54, reads:

11 "Referring to FIG. 1, an exemplary communication network system 10 in which the
12 present invention may be implemented is disclosed. System 10 is comprised of a plurality
13 of wireless telephones 100, a wireless sub-network 102, a network interface 101, and a
14 computer network 104. Wireless sub-network 102 is further comprised of a plurality of
15 base stations 116 and a controller 112. Computer network 104 is further comprised of a
16 Public Switched Telephone Network (PSTN) 110, a plurality of telephones represented by
17 telephone 111, and a plurality of computers represented by computer 117. While not
18 shown, it is understood that computer 117 could also represent the Internet). Network
19 system 10 may have other components/configurations, but these are not shown to
20 facilitate description of the unique aspects of this embodiment of the invention."

21 Hefter col. 9, lines 34-54 read:

22 "FIG. 10 shows a detailed flow diagram of the process performed when a user of a
23 wireless telephone 100 dials a number for a computer 117 on network 104. As shown in
24 step 1010, when a user initiates an access request (dials the number to a network interface
25 corresponding to computer 117, or speaks command into user interface 214), the request
26 is transmitted to public switch 140. In step 1020, public switch 140 issues a request to
27 CTI server 144 requesting that the CTI server 144 provide the public switch with
28 instructions as to what to do with the dialing request. CTI server 144 determines whether
29 there are any available ports on the multiplexer/demultiplexer 142 (step 1030). (Note,
30 there can be a dialog between the CTI server 144 and the multiplexer/demultiplexer 142 to
31 determine the appropriate terminating port and associated telephone number). If there are
32 available ports (step 1040), CTI server 144 instructs the switch 140 to redirect the call to
33 a telephone number representing a free port on multiplexer/demultiplexer 142. The
34 multiplexer/demultiplexer 142 will then establish the path to computer 117 and
35 information will flow freely between wireless telephone 100 and the computer 117."

Although, these portions use words and some phrases as in claim 1, the words are not combined to make the of the steps of interacting or the step employing of claim 1. Hefter does not make obvious "a user interacting with at least one remote service accessible through a home data distribution network, said home data distribution network comprising an aggregation of at least one communications media and at least one communications protocol used to access said at least one remote service from a serving entity." Hefter is not concerned with interacting with a remote service. Hefter is not concerned with a remote service accessible through a home data distribution network being an aggregation of a communications media and a communications protocol used to access the remote service from a serving entity. Hefter is not concerned with employing only one of a cellular voice network and a PSTN. Hefter is not concerned with a user connecting to a serving entity attached to a home data distribution network using a client device as in claim 1.

Similarly, exception is taken with the office communication statement regarding the teaching of claim 1 elements by Sawada (See col. 1, lines 39-43, col. 2, lines 16-50). Sawada col. 1, lines 39-43, reads:

"Then, when accessed by a device incorporating a WWW browser on another network, the home network gateway apparatus sends necessary information to the device and displays a list of home network devices on the display of the device."

Sawada col. 2, lines 16-50, reads:

"In another mode of the home network gateway apparatus of the present invention, when instructed by an apparatus incorporating a WWW browser on the home network or a network other than the home network to remotely control the home network device via the list menu, the home network gateway apparatus sends control information to the home network device based on the device operation information and makes the device execute the operation as instructed.

This makes it possible to remotely control the home network device via the homepage.

In another mode of the home network gateway apparatus of the present invention, if a device is connected to the home network, the home network gateway apparatus acquires identification information and download server address information output from the home network apparatus. The home network gateway apparatus then accesses the download server based on the address information and downloads and stores the screen creation

1 information and device operation information on the home network device. The home
2 network gateway apparatus then posts information of all devices connected to the home
3 network in a list menu form on a built-in WWW server.
4

5 In another mode of the home network gateway apparatus, if connection of a home
6 network device to the home network is canceled, the home network gateway apparatus
7 automatically deletes the information of the device from the list menu.
8

9 In another mode of the home network gateway apparatus, when instructed by an
10 apparatus incorporating a WWW browser on the home network or a network other than
11 the home network to remotely control the home network device via the list menu, the
12 home network gateway apparatus sends control information to the home network device
13 based on the device operation information and makes the device execute the operation as
14 instructed.

15 A review of these portions of Sawada shows that Sawada does not teach, allude to or make
16 obvious the other steps of claim 1 for obtaining, selecting or accessing of claim 1. Sawada does
17 not teach, allude to or make obvious a step of obtaining and viewing a list of at least one remote
18 service. Sawada's list is "a list of home network devices on the display of the device." Sawada
19 does not teach, allude to or make obvious "accessible remote services from a serving entity
20 accessible remotely via said home network from said serving entity using at least one of said
21 communications media and one of said communications protocols." Sawada does not teach,
22 allude to or make obvious selecting a remote service from a list Sawada doesn't have.
23 Sawada does not teach, allude to or make obvious selecting a communications media and a
24 communications protocol that a remote service uses. Finally Sawada does not teach, allude to or
25 make obvious a step of "accessing and viewing said at least one remote service in obtaining
26 desired results." Thus claim 1 and all claims that depend on claim 1 are allowable over the cited
27 combined art.

28 Regarding Claim 2, it is clear that it is not made obvious by the combined cited art.
29 Applicants respectfully state that it was shown that Hefter fails to teach the claimed invention,
30 and claim 2 is allowable because it depends on claim 1.

31 Regarding Claim 3, it is clear that it is not made obvious by the combined cited art.
32 Applicants respectfully state that claim 3 is a very narrow claim. It protects a particular

embodiment of the present invention with its clear advantages. It is allowable even when Hefter Sawada are combined with Kawasaki. It has a special combination of many elements useful for the particular embodiment of the present invention.

Claim 3 reads:

3. (previously presented) A method as recited in claim 1,

wherein the client device is a cellular telephone;

wherein the step of connecting includes dialing-up directly to the serving entity;

wherein the step of viewing is performed employing a viewing device collocated with said client device;

wherein the viewing device depicts information in a form including at least one of: text, graphics, images, light display, voice or any combination of these;

wherein the step of selecting includes employing a menu;

wherein the step of viewing is performed employing a web-browser and the serving entity is a web-server;

wherein the step of connecting includes dialing-up to the serving entity through a data network to which the serving entity is connected;

wherein the data network is the Intranet controlled by an Internet Service Provider;

wherein the data network uses the TCP/IP protocol suite for transporting information;

1 wherein said wireless, circuit-switched, voice telephony network is a first generation,
2 analog, cellular network;

3 wherein said wireless, circuit-switched, voice telephony network is a second generation,
4 digital, cellular network;

5 wherein the step of dialing-up directly to the service entity further includes passing dialing
6 signaling and control data to the serving entity through an intermediary data network;

7 wherein the step of dialing-up to the serving entity through a data network, further
8 includes dialing-up to the serving entity through a sequence of at least one data network,
9 the last one of which the serving entity is attached to;

10 wherein at least one service agent is a computer software module executable on a
11 computer; and

12 wherein the step of viewing views the list on a viewing device in a manner that depends on
13 the user's access privileges to said at least one remote service, and further comprising:

14 said serving entity employing attributes of said circuit switch network in
15 authenticating said user, wherein said attributes include a telephone number of said
16 client device, and wherein said attributes include a telephone number of said
17 serving entity;

18 establishing credentials so that said at least one remote service can be manipulated
19 in a secure manner on the serving entity;

20 the serving entity providing access to at least one service agent used to access and
21 control said at least one remote service;

1 activating said computer software module prior to invoking a particular remote
2 service;

3 activating said computer software module on demand after a particular remote
4 service has been invoked;

5 storing said computer software module at a data repository; and

6 dynamically retrieving and activating said computer software module from the data
7 repository after invoking a particular remote service.

8 The office communication fails to show these steps of service provision to a cellular telephone .
9 Applicants take exception to the alleged equivalent teach of the references and claim 3. But, even
10 if the office communication would be correct that the combined art makes each element in claim 3
11 obvious, a new, novel and advantageous combination is allowable. Thus claim 3 is certainly
12 allowable for itself and because it depends on claim 1.

13 Regarding Claims 4 -26 which are lumped together in the office communication as being
14 obvious because of claim 3. The office communication only states:

15 *2. As per claims 4-26 see claim 3 above.*

16 The office communication fails to show any reason for each of claims 4-26 being made obvious by
17 the combined cited art. It is clear that as with claim 3, each claim is not made obvious by the
18 combined cited art. Applicants respectfully state that all these claims are allowable each for itself
19 and because each ultimately depends on allowable claim 1.

20 Regarding Claim 27, it is clear that it is not made obvious by the combined cited art.
21 Claim 27 is a Beauregard claim for an article of manufacture comprising a computer usable
22 medium having computer readable program code means embodied therein for causing a user to
23 interact with at least one remote service causing a computer to effect the steps of claim 1.
24 Applicants contend there is apparently no showing in the cited art for a software implementation

1 of a user to interact with at least one remote service. Thus claim 27 is allowable for itself and
2 because it depends on allowable claim 1.

3 Regarding Claim 28, it is clear that it is not made obvious by the combined cited art.
4 Claim 28 is a Beauregard claim for a program storage device readable by machine, tangibly
5 embodying a program of instructions executable by the machine to perform method steps for
6 causing a user to interact with at least one remote service, said method steps comprising the steps
7 of claim 1. Applicants contend there is apparently no showing in the cited art for a software
8 implementation of a user to interact with at least one remote service. Thus claim 28 is allowable
9 for itself and because it depends on allowable claim 1.

10 Regarding Claim 29, it is clear that it is not made obvious by the combined cited art.
11 Claim 29 protects an apparatus for a user to interact with at least one remote service. Claim 29
12 reads:

13 29. An apparatus for a user to interact with at least one remote service, comprising:

14 user connecting means for said user connecting to a serving entity using a client device
15 attached to a wireless, circuit-switched, voice telephony network, said user connecting
16 means employing only one of a cellular voice network and a PSTN;

17 user viewing means for obtaining and viewing a list of accessible remote services from said
18 serving entity;

19 second connecting means for attaching said apparatus to a communications medium and
20 using a communications protocols, taken from an aggregation of communication media
21 and protocols, through which said at least one remote service can be accessed;

22 user selecting means for selecting said at least one remote service from said list;

1 second selecting means for selecting the communications medium and protocol to access
2 said selected at least one service; and

3 user access means for accessing and viewing said at least one remote service in obtaining
4 desired results.

5 There is apparently no showing in the office communication as to why claim 29 is not allowable
6 over the cited art. The combined cited art fails to show:

7 any user connecting means;

8 any user viewing means;

9 any second connecting means;

10 any user selecting means;

11 any second selecting means; or

12 any user access means,

13 each performing its specific function as claimed in claim 29. Thus claim 29 is allowable over the
14 cited art.

15 Regarding Claim 30, it is clear that it is not made obvious by the combined cited art.
16 Claim 30 is a Beauregard claim for a computer program product comprising a computer usable
17 medium having computer readable program code means embodied therein for causing a user to
18 interact with at least one remote service to effect the functions of claim 28. Applicants contend
19 there is apparently no showing in the cited art for a software implementation of a user to interact
20 with at least one remote service. Thus claim 30 is allowable for itself and because it ultimately

depends on allowable claim 1.

Regarding Claim 31, it is clear that it is not made obvious by the combined cited art. Applicants respectfully state that exception is taken with the claimed reading of the elements of claim 31 and Hefter with Sawada. Claim 31 is an apparatus claim and as with claim 1, neither Hefter and/or Sawada have the elements of claim 31. Claim 31 reads:

31. An apparatus attached on a home network for a user using a client device attached to a wireless, circuit-switched, voice telephony network, to interact with at least one service on said home network, said apparatus comprising:

a telephone modem to directly receive an incoming call from the client device, and also to receive and transmit data over a telephone network, said telephone modem having a client port through which the apparatus attaches to the telephone network, said apparatus being a single apparatus through which a user with the ~~user~~ client device can establish communication in one step,

said client device employing only one of a cellular voice network and a PSTN;

a dial-in service module to implement dial-in logic for the client device;

a browser server module for managing data for remote display; and

a protocol transport module to implement protocols needed to transport data back and forth between a browser application in the client device and said browser server module.

A review of the cited references shows that the combination apparently do not teach, allude to or make obvious a "client device employing **only one of a cellular voice network and a PSTN.** The combination apparently do not teach, allude to or make obvious "a dial-in service module to implement dial-in logic for the client device. The combination apparently do not teach, allude to or make obvious "a browser server module for managing data for remote display." The

1 combination apparently do not teach, allude to or make obvious "a protocol transport module to
2 implement protocols needed to transport data back and forth between a browser application in the
3 client device and said browser server module." Neither cited reference is concerned with protocol
4 transport, implementing dial-in logic, managing data for remote display, or a protocol transport
5 module. Thus claim 31 and all claims that depend thereon are allowable over the cited art.

6 Regarding Claim 32, it is clear that it is not made obvious by the combined cited art.
7 Applicants respectfully state that it was shown that Hefter and Sawada fail to teach the invention
8 in claim 31. Hefter col. 5, lines 5-10 reads:

9 "controller 112, which in turn, controls the base stations 116. Controller 112
10 communicates with computer network 104 via interface 101 with PSTN 110. To achieve
11 the desired handover functionality required in wireless networks and contemplated by this
12 invention, base stations 116, each communicate with a corresponding controller 112. The
13 various components of network 10 will now be described in more detail. As disclosed in
14 further detail below, network 104 connects telephone and computers to controller 112."

15 This is not an indication of a teaching "teaches wherein said browser server is used to obtain,
16 organize, and manipulate data received from and data sent to the client device through the
17 protocol transport module," as stated in the office communication above. This is not a teaching
18 of a "browser server is used to obtain, organize, and manipulate data received from and data sent
19 to the client device through the protocol transport module," as in claim 32. So claim 32 is
20 allowable for itself and because it depends on claim 31.

21 Regarding Claim 33, it is clear that it is not made obvious by the combined cited art.
22 Applicants respectfully state that exception is taken with the claimed reading of the elements of
23 claim 33 and Hefter with Sawada. A review of the cited portion Sawada (See col. 2, lines 20-49)
24 and Hefter (See col. 1, lines 30-34). It would indeed not be obvious to one with ordinary skill in
25 the art at the time the invention was made to incorporate the teaching of Sawada in the claimed
26 invention Hefter in order to in order to make remotely control home devices (See col. 1, lines
27 30-34). A review of the cited portion apparently fails to make the showing stated by the office
28 communication. So claim 33 is allowable for itself and because it depends on claim 31.

1 Regarding Claim 34, it is clear that it is not made obvious by the combined cited art. As
2 stated in the responsive amendment, the applicants respectfully state that exception is taken with
3 the claimed reading of the elements of claim 34 and Hefter with Sawada. A review of the cited
4 portion apparently fails to make the showing stated by the office communication. So claim 34 is
5 allowable for itself and because it depends on claim 31.

6 Regarding Claim 35, it is clear that it is not made obvious by the combined cited art. As
7 stated in the responsive amendment, the applicants respectfully state that exception is taken with
8 the claimed reading of the elements of claim 35 and Hefter with Sawada and the it "would have
9 been obvious" statement above. A review of the cited portion apparently fails to make the
10 showing stated by the office communication. So claim 35 is allowable for itself and because it
11 depends on claim 31.

12 Regarding Claim 36, it is clear that it is not made obvious by the combined cited art. As
13 stated in the responsive amendment, the applicants respectfully state that exception is taken with
14 the claimed reading of the elements of claim 36 and Hefter with Sawada. A review of the cited
15 portion apparently fails to make the showing stated by the office communication. So claim 36 is
16 allowable for itself and because it depends on claim 31.

17 Regarding Claim 37, it is clear that it is not made obvious by the combined cited art. As
18 stated in the responsive amendment, the applicants respectfully state that exception is taken with
19 the claimed reading of the elements of claim 36 and Hefter with Sawada. A review of the cited
20 portion apparently fails to make the showing stated by the office communication. So claim 36 is
21 allowable for itself and because it depends on claim 31.

22 **CONCLUSION:**

23 For at least the above reasons, applicants believe that the invention claimed in claims 1-37, is
24 distinct from the cited prior art. Therefore applicants respectfully request that the Examiner

1 withdraw the rejections and allow claims 1-37.

2 The Board of Appeals is, thus, respectfully asked to reverse the rejection of Claims 1 and
3 3 under 35 U.S.C. §112, and claims 1-37, under 35 U.S.C. §103(a).

4 Please charge any fee necessary to enter this paper to deposit account 50-0510.

5 Respectfully submitted,

6 By: /Louis Herzberg/
7 Dr. Louis P. Herzberg
8 Reg. No. 41,500
9 Voice Tel. (845) 352-3194
10 Fax. (845) 352-3194
11 3 Cloverdale Lane
12 Monsey, NY 10952
13 Customer Number: 54856

1 **(J) CLAIMS APPENDIX**

2 LISTING OF THE CLAIMS

3 This is a clean listing of the claims, cleaning the claims submitted with the amendment
4 after FINAL on March 16, 2007.

5 A listing of the claims showing the amendments to claims 1 and 3 as submitted with the
6 amendment after FINAL is also appended.

7 **CLAIMS**

- 8 1. (previously presented) A service interaction method comprising a user interacting with at least
9 one remote service accessible through a home data distribution network, said home data
10 distribution network comprising an aggregation of at least one communications media and at least
11 one communications protocol used to access said at least one remote service from a serving
12 entity, the step of interacting comprising:
- 13 employing only one of a cellular voice network and a PSTN, said user connecting to a serving
14 entity attached to said home data distribution network using a client device attached to a wireless,
15 circuit-switched, voice telephony network,
- 16 obtaining and viewing a list of at least one remote service from accessible remote services from
17 said serving entity accessible remotely via said home network from said serving entity using at
18 least one of said communications media and one of said communications protocols;
- 19 selecting said at least one remote service from said list;
- 20 selecting said at least one communications media and at least one communications protocol that
21 said at least one remote service uses; and
- 22 accessing and viewing said at least one remote service in obtaining desired results.

- 1 2. (original) A method as recited in claim 1, wherein the client device is portable.
- 2 3. (previously presented) A method as recited in claim 1,
- 3 wherein the client device is a cellular telephone;
- 4 wherein the step of connecting includes dialing-up directly to the serving entity;
- 5 wherein the step of viewing is performed employing a viewing device collocated with said client
- 6 device;
- 7 wherein the viewing device depicts information in a form including at least one of: text, graphics,
- 8 images, light display, voice or any combination of these;
- 9 wherein the step of selecting includes employing a menu;
- 10 wherein the step of viewing is performed employing a web-browser and the serving entity is a
- 11 web-server;
- 12 wherein the step of connecting includes dialing-up to the serving entity through a data network to
- 13 which the serving entity is connected;
- 14 wherein the data network is the Intranet controlled by an Internet Service Provider;
- 15 wherein the data network uses the TCP/IP protocol suite for transporting information;
- 16 wherein said wireless, circuit-switched, voice telephony network is a first generation, analog,
- 17 cellular network;

1 wherein said wireless, circuit-switched, voice telephony network is a second generation, digital,
2 cellular network;

3 wherein the step of dialing-up directly to the service entity further includes passing dialing
4 signaling and control data to the serving entity through an intermediary data network;

5 wherein the step of dialing-up to the serving entity through a data network, further includes
6 dialing-up to the serving entity through a sequence of at least one data network, the last one of
7 which the serving entity is attached to;

8 wherein at least one service agent is a computer software module executable on a computer; and

9 wherein the step of viewing views the list on a viewing device in a manner that depends on the
10 user's access privileges to said at least one remote service, and further comprising:

11 said serving entity employing attributes of said circuit switch network in authenticating
12 said user, wherein said attributes include a telephone number of said client device, and
13 wherein said attributes include a telephone number of said serving entity;

14 establishing credentials so that said at least one remote service can be manipulated in a
15 secure manner on the serving entity;

16 the serving entity providing access to at least one service agent used to access and control
17 said at least one remote service;

18 activating said computer software module prior to invoking a particular remote service;

19 activating said computer software module on demand after a particular remote service has
20 been invoked;

1 storing said computer software module at a data repository; and

2 dynamically retrieving and activating said computer software module from the data
3 repository after invoking a particular remote service.

4 4. (original) A method as recited in claim 1, wherein the step of connecting includes dialing-up
5 directly to the serving entity.

6 5. (original) A method as recited in claim 1, wherein the step of viewing is performed employing a
7 viewing device collocated with said client device.

8 6. (previously presented) A method as recited in claim 1, wherein the viewing device depicts
9 information in a form including at least one of: text, graphics, images, light display, voice or any
10 combination of these.

11 7. (original) A method as recited in claim 1, wherein the step of selecting includes employing a
12 menu.

13 8. (original) A method as recited in claim 5, wherein the step of viewing is performed employing a
14 web-browser and the serving entity is a web-server.

15 9. (original) A method as recited in claim 1, wherein the step of connecting includes dialing-up to
16 the serving entity through a data network to which the serving entity is connected.

17 10. (original) A method as recited in claim 9, wherein the data network is the Intranet controlled
18 by an Internet Service Provider.

19 11. (original) A method as recited in claim 9, wherein the data network uses the TCP/IP protocol
20 suite for transporting information.

12. (original) A method as recited in claim 1, further comprising said serving entity employing attributes of said circuit switch network in authenticating said user.

13. (original) A method as recited in claim 12, wherein said attributes include a telephone number of said client device.

14. (original) A method as recited in claim 12, wherein said attributes include a telephone number of said serving entity.

15. (original) A method as recited in claim 1, further comprising establishing credentials so that said at least one remote service can be manipulated in a secure manner on the serving entity.

16. (original) A method as recited in claim 1, wherein the step of viewing views the list on a viewing device in a manner that depends on the user's access privileges to said at least one remote service.

17. (original) A method as recited in claim 1, further comprising the serving entity providing access to at least one service agent used to access and control said at least one remote service.

18. (original) A method as recited in claim 17, wherein at least one of said at least one service agent is a computer software module executable on a computer.

19. (original) A method as recited in claim 18, further comprising activating said software module prior to invoking a particular remote service.

20. (original) A method as recited in claim 18, further comprising activating said software module on demand after a particular remote service has been invoked.

21. (original) A method as recited in claim 18, further comprising storing said software module at a data repository.

22. (original) A method as recited in claim 21, further comprising dynamically retrieving and activating said software module from the data repository after invoking a particular remote service.

23. (original) A method as recited in claim 1, wherein said wireless, circuit-switched, voice telephony network is a first generation, analog, cellular network.

24. (original) A method as recited in claim 1, wherein said wireless, circuit-switched, voice telephony network is a second generation, digital, cellular network.

25. (original) A method as recited in claim 4, wherein the step of dialing-up directly to the service entity further includes passing dialing signaling and control data to the serving entity through an intermediary data network.

26. (original) A method as recited in claim 9, wherein the step of dialing-up to the serving entity through a data network, further includes dialing-up to the serving entity through a sequence of at least one data network, the last one of which the serving entity is attached to.

27. (original) An article of manufacture comprising a computer usable medium having computer readable program code means embodied therein for causing a user to interact with at least one remote service, the computer readable program code means in said article of manufacture comprising computer readable program code means for causing a computer to effect the steps of claim 1.

28. (original) A program storage device readable by machine, tangibly embodying a program of instructions executable by the machine to perform method steps for causing a user to interact with at least one remote service, said method steps comprising the steps of claim 1.

29. (Previously presented) An apparatus for a user to interact with at least one remote service,

1 comprising:

2 user connecting means for said user connecting to a serving entity using a client device attached
3 to a wireless, circuit-switched, voice telephony network, said user connecting means employing
4 only one of a cellular voice network and a PSTN;

5 user viewing means for obtaining and viewing a list of accessible remote services from said
6 serving entity;

7 second connecting means for attaching said apparatus to a communications medium and using a
8 communications protocols, taken from an aggregation of communication media and protocols,
9 through which said at least one remote service can be accessed;

10 user selecting means for selecting said at least one remote service from said list;

11 second selecting means for selecting the communications medium and protocol to access said
12 selected at least one service; and

13 user access means for accessing and viewing said at least one remote service in obtaining desired
14 results.

15 30. (original) A computer program product comprising a computer usable medium having
16 computer readable program code means embodied therein for causing a user to interact with at
17 least one remote service, the computer readable program code means in said computer program
18 product comprising computer readable program code means for causing a computer to effect the
19 functions of claim 28.

20 31. (Previously presented) An apparatus attached on a home network for a user using a client
21 device attached to a wireless, circuit-switched, voice telephony network, to interact with at least
22 one service on said home network, said apparatus comprising:

1 a telephone modem to directly receive an incoming call from the client device, and also to receive
2 and transmit data over a telephone network, said telephone modem having a client port through
3 which the apparatus attaches to the telephone network, said apparatus being a single apparatus
4 through which a user with the client device can establish communication in one step,
5 said client device employing only one of a cellular voice network and a PSTN;

6 a dial-in service module to implement dial-in logic for the client device;

7 a browser server module for managing data for remote display; and

8 a protocol transport module to implement protocols needed to transport data back and forth
9 between a browser application in the client device and said browser server module.

10 32. (original) An apparatus as recited in claim 31, wherein said browser server is used to obtain,
11 organize, and manipulate data received from and data sent to the client device through the
12 protocol transport module.

13 33. (original) An apparatus as recited in claim 32, wherein said data sent to the client device are
14 displayed and viewed by the browser application in the client device.

15 34. (previously presented) An apparatus as recited in claim 32, wherein said data sent includes a
16 list of services that are accessible by the client device.

17 35. (Previously presented) An apparatus as recited in claim 31, wherein said data received by the
18 browser application in the client device include a selection of at least one service the user of the
19 client device controls and an action to be taken for a selected service, and upon receipt of the
20 action the browser server interacts with a particular service agent to implement the control logic
21 for controlling the selected service, wherein a control signal generated by the service agent exits
22 the apparatus through attachment of the home network.

1 36. (Previously presented) An apparatus as recited in claim 31, wherein said dial-in server module
2 triggers at least one particular module in the apparatus to process any incoming calls and requests
3 from the client device.

4 37. (previously presented) An apparatus as recited in claim 31, wherein said dial-in server module
5 performs user authentication.
6

1 This listing lists the claims as they were amended in the last response to the FINAL office action,
2 March 16, 2007.

3 **CLAIMS**

4 1. (Currently amended) 1. A service interaction method comprising a user interacting with at least
5 one remote service accessible through a home data distribution network, said home data
6 distribution network comprising an aggregation of at least one communications media and at least
7 one communications protocol used to access said at least one remote service from a serving
8 entity, the step of interacting comprising:

9 employing only one of a cellular voice network and a PSTN, said user connecting to a serving
10 entity attached to said home data distribution network using a client device attached to a wireless,
11 circuit-switched, voice telephony network,

12 obtaining and viewing a list of at least one remote service from accessible remote services from
13 said serving entity accessible remotely via said home network from said serving entity using at
14 least one of said communications media and one of said communications protocols;

15 selecting said at least one remote service from said list;

16 selecting said at least one communications media and at least one communications protocol that
17 said ~~selected~~ at least one remote service uses; and

18 accessing and viewing said at least one remote service in obtaining desired results.

19 2. (original) A method as recited in claim 1, wherein the client device is portable.

20 3. (Currently amended) A method as recited in claim 1,

- 1 wherein the client device is a cellular telephone;
- 2 wherein the step of connecting includes dialing-up directly to the serving entity;
- 3 wherein the step of viewing is performed employing a viewing device collocated with said client
4 device;
- 5 wherein the viewing device depicts information in a form including at least one of: text, graphics,
6 images, light display, voice or any combination of these;
- 7 wherein the step of selecting includes employing a menu;
- 8 wherein the step of viewing is performed employing a web-browser and the serving entity is a
9 web-server;
- 10 wherein the step of connecting includes dialing-up to the serving entity through a data network to
11 which the serving entity is connected;
- 12 wherein the data network is the Intranet controlled by an Internet Service Provider;
- 13 wherein the data network uses the TCP/IP protocol suite for transporting information;
- 14 wherein said wireless, circuit-switched, voice telephony network is a first generation, analog,
15 cellular network;
- 16 wherein said wireless, circuit-switched, voice telephony network is a second generation, digital,
17 cellular network;
- 18 wherein the step of dialing-up directly to the service entity further includes passing dialing

1 signaling and control data to the serving entity through an intermediary data network;

2 wherein the step of dialing-up to the serving entity through a data network, further includes

3 dialing-up to the serving entity through a sequence of at least one data network, the last one of

4 which the serving entity is attached to;

5 wherein at least one of ~~said at least one~~ service agent is a computer software module executable

6 on a computer; and

7 wherein the step of viewing views the list on a viewing device in a manner that depends on the

8 user's access privileges to said at least one remote service, and further comprising:

9 said serving entity employing attributes of said circuit switch network in authenticating

10 said user, wherein said attributes include a telephone number of said client device, and

11 wherein said attributes include a telephone number of said serving entity;

12 establishing credentials so that said at least one remote service can be manipulated in a

13 secure manner on the serving entity;

14 the serving entity providing access to at least one service agent used to access and control

15 said at least one remote service;

16 activating said computer software module prior to invoking a particular remote service;

17 activating said computer software module on demand after a particular remote service has

18 been invoked;

19 storing said computer software module at a data repository; and

20 dynamically retrieving and activating said computer software module from the data

repository after invoking a particular remote service.

4. (original) A method as recited in claim 1, wherein the step of connecting includes dialing-up directly to the serving entity.

5. (original) A method as recited in claim 1, wherein the step of viewing is performed employing a viewing device collocated with said client device.

6. (previously presented) A method as recited in claim 1, wherein the viewing device depicts information in a form including at least one of: text, graphics, images, light display, voice or any combination of these.

7. (original) A method as recited in claim 1, wherein the step of selecting includes employing a menu.

8. (original) A method as recited in claim 5, wherein the step of viewing is performed employing a web-browser and the serving entity is a web-server.

9. (original) A method as recited in claim 1, wherein the step of connecting includes dialing-up to the serving entity through a data network to which the serving entity is connected.

10. (original) A method as recited in claim 9, wherein the data network is the Intranet controlled by an Internet Service Provider.

11. (original) A method as recited in claim 9, wherein the data network uses the TCP/IP protocol suite for transporting information.

12. (original) A method as recited in claim 1, further comprising said serving entity employing attributes of said circuit switch network in authenticating said user.

1 13. (original) A method as recited in claim 12, wherein said attributes include a telephone number
2 of said client device.

3 14. (original) A method as recited in claim 12, wherein said attributes include a telephone number
4 of said serving entity.

5 15. (original) A method as recited in claim 1, further comprising establishing credentials so that
6 said at least one remote service can be manipulated in a secure manner on the serving entity.

7 16. (original) A method as recited in claim 1, wherein the step of viewing views the list on a
8 viewing device in a manner that depends on the user's access privileges to said at least one remote
9 service.

10 17. (original) A method as recited in claim 1, further comprising the serving entity providing
11 access to at least one service agent used to access and control said at least one remote service.

12 18. (original) A method as recited in claim 17, wherein at least one of said at least one service
13 agent is a computer software module executable on a computer.

14 19. (original) A method as recited in claim 18, further comprising activating said software module
15 prior to invoking a particular remote service.

16 20. (original) A method as recited in claim 18, further comprising activating said software module
17 on demand after a particular remote service has been invoked.

18 21. (original) A method as recited in claim 18, further comprising storing said software module at
19 a data repository.

20 22. (original) A method as recited in claim 21, further comprising dynamically retrieving and
21 activating said software module from the data repository after invoking a particular remote

1 service.

2 23. (original) A method as recited in claim 1, wherein said wireless, circuit-switched, voice
3 telephony network is a first generation, analog, cellular network.

4 24. (original) A method as recited in claim 1, wherein said wireless, circuit-switched, voice
5 telephony network is a second generation, digital, cellular network.

6 25. (original) A method as recited in claim 4, wherein the step of dialing-up directly to the service
7 entity further includes passing dialing signaling and control data to the serving entity through an
8 intermediary data network.

9 26. (original) A method as recited in claim 9, wherein the step of dialing-up to the serving entity
10 through a data network, further includes dialing-up to the serving entity through a sequence of at
11 least one data network, the last one of which the serving entity is attached to.

12 27. (original) An article of manufacture comprising a computer usable medium having computer
13 readable program code means embodied therein for causing a user to interact with at least one
14 remote service, the computer readable program code means in said article of manufacture
15 comprising computer readable program code means for causing a computer to effect the steps of
16 claim 1.

17 28. (original) A program storage device readable by machine, tangibly embodying a program of
18 instructions executable by the machine to perform method steps for causing a user to interact with
19 at least one remote service, said method steps comprising the steps of claim 1.

20 29. (Previously presented) An apparatus for a user to interact with at least one remote service,
21 comprising:

22 user connecting means for said user connecting to a serving entity using a client device attached

1 to a wireless, circuit-switched, voice telephony network, said user connecting means employing
2 only one of a cellular voice network and a PSTN;

3 user viewing means for obtaining and viewing a list of accessible remote services from said
4 serving entity;

5 second connecting means for attaching said apparatus to a communications medium and using a
6 communications protocols, taken from an aggregation of communication media and protocols,
7 through which said at least one remote service can be accessed;

8 user selecting means for selecting said at least one remote service from said list;

9 second selecting means for selecting the communications medium and protocol to access said
10 selected at least one service; and

11 user access means for accessing and viewing said at least one remote service in obtaining desired
12 results.

13 30. (original) A computer program product comprising a computer usable medium having
14 computer readable program code means embodied therein for causing a user to interact with at
15 least one remote service, the computer readable program code means in said computer program
16 product comprising computer readable program code means for causing a computer to effect the
17 functions of claim 28.

18 31. (Previously presented) An apparatus attached on a home network for a user using a client
19 device attached to a wireless, circuit-switched, voice telephony network, to interact with at least
20 one service on said home network, said apparatus comprising:

21 a telephone modem to directly receive an incoming call from the client device, and also to receive
22 and transmit data over a telephone network, said telephone modem having a client port through

1 which the apparatus attaches to the telephone network, said apparatus being a single apparatus
2 through which a user with the ~~user~~ client device can establish communication in one step,
3 said client device employing only one of a cellular voice network and a PSTN;

4 a dial-in service module to implement dial-in logic for the client device;

5 a browser server module for managing data for remote display; and

6 a protocol transport module to implement protocols needed to transport data back and forth
7 between a browser application in the client device and said browser server module.

8 32. (original) An apparatus as recited in claim 31, wherein said browser server is used to obtain,
9 organize, and manipulate data received from and data sent to the client device through the
10 protocol transport module.

11 33. (original) An apparatus as recited in claim 32, wherein said data sent to the client device are
12 displayed and viewed by the browser application in the client device.

13 34. (previously presented) An apparatus as recited in claim 32, wherein said data sent includes a
14 list of services that are accessible by the client device.

15 35. (Previously presented) An apparatus as recited in claim 31, wherein said data received by the
16 browser application in the client device include a selection of at least one service the user of the
17 client device controls and an action to be taken for a selected service, and upon receipt of the
18 action the browser server interacts with a particular service agent to implement the control logic
19 for controlling the selected service, wherein a control signal generated by the service agent exits
20 the apparatus through attachment of the home network.

21 36. (Previously presented) An apparatus as recited in claim 31, wherein said dial-in server module
22 triggers at least one particular module in the apparatus to process any incoming calls and requests

- 1 from the client device.
- 2 37. (previously presented) An apparatus as recited in claim 31, wherein said dial-in server module
- 3 performs user authentication.

1

2 **(K) EVIDENCE APPENDIX**

3 Copies of any evidence submitted

4 There is no evidence entered by the Examiner and relied upon by appellant in this appeal.

1 (L) RELATED PROCEEDINGS APPENDIX.

- 2 There are no decisions rendered by a court or the Board in any proceeding identified pursuant to
3 paragraph (c)(1)(ii) of this section.